

## NOTES ON WESTERN AUSTRALIAN LAMPREYS.

By W. B. ALEXANDER, M.A., Keeper of Biology, W.A. Museum.

(Read Oct. 14, 1919.)

### 1. General.

As far as is known at present two species of Lamprey are found in the rivers of Western Australia, namely, the Wide-mouthed Lamprey (*Geotria australis*, Gray) and the Narrow-mouthed Lamprey (*G. (Velasia) stenostoma*, Ogilby).

Both these species are said to be found also in South-Eastern Australia, Tasmania, New Zealand, and Chile. It does not appear, however, that any worker has been in a position to compare South American and Australasian specimens, and until this has been done the specific identity of such distant forms must be considered doubtful. Should an examination prove that they are really the same, the name given to the Narrow-mouthed Lamprey of Australia by Ogilby (*Geotria stenostoma*) will become a synonym of *Geotria chilensis* of Gray. Dr. J. A. Leach,\* the most recent writer on Australian Lampreys, uses the latter name, but I agree with Ogilby† that it is preferable to regard animals from two such widely different localities as distinct until they are proved to be identical.

The only comprehensive account of the Lampreys of Australia published hitherto is a Monograph by the veteran Australian ichthyologist, Mr. J. Douglas Ogilby, which appeared in the Proceedings of the Linnean Society of New South Wales for 1896† The more recent papers by Regan‡ and Leach\* only deal with classification. It appears from Ogilby's paper that a single specimen of *Geotria stenostoma* from Swan River is in the British Museum, whilst Klunzinger recorded the occurrence of *G. australis* at King George's Sound. These two specimens are apparently the only ones hitherto known from Western Australia.

Both species appear to be fairly common in the rivers of the South-West, since there are in the W.A. Museum twelve specimens of the Wide-mouthed Lamprey and four of the Narrow-mouthed Lamprey.

Specimens of the former species have been received from Fremantle and Mandurah, and from the Serpentine, Collie, and Blackwood Rivers; whilst specimens of the latter have been received from Midland Junction and Harvey.

The breeding habits of the Australian species of *Geotria* are apparently quite unknown. It is known, however, that as in the European and North American species the larval form or ammocoetes is very different from the adult. The chief feature of their

life history that has attracted attention is their habit of travelling up rivers in swarms, and even negotiating waterfalls *en route* by means which are fully detailed in Mr. Herbert's record of his observations at Beedelup Brook. These migrations of lampreys were familiar to the Maoris in New Zealand, and on such occasions large numbers were captured, as they were regarded as a great delicacy. Similar migrations have been observed in Tasmania and Victoria. The distance to which they ascend from the sea is often very great. As an instance, I may mention that a specimen of the Wide-mouthed Lamprey was obtained in July, 1919, in the Blackwood River, near Boyup. Mr. F. T. Knapp informs me that to have reached the pool where it was obtained from the sea the Lamprey must have negotiated about 300 miles of waterway (allowing for the bends in the river), and some of the pools were only connected by about one or two inches of water over the sandy crossings, full flood not having commenced.

#### *References.*

- (\*) Leach. Species of Victorian Lampreys. Report Brit. Ass. Adv. Sci., Australia, 1914, p. 309.
  - (†) Ogilby. Monograph of the Australian *Marsipobranchii*. Proc. Linn. Soc. N.S. Wales, XXI., 1896, p. 388.
  - (‡) Regan. Synopsis of the Marsipobranchs of the Order *Hyperoartii*. Ann. Mag. Nat. Hist. series 8, Vol. VII., 1911, p. 193.
-